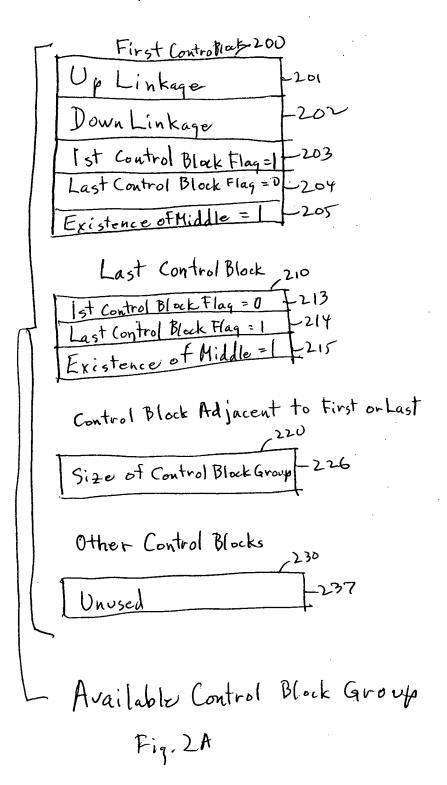


Fig.1



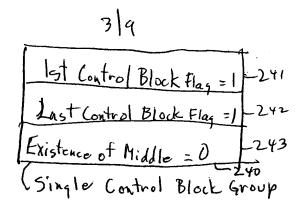
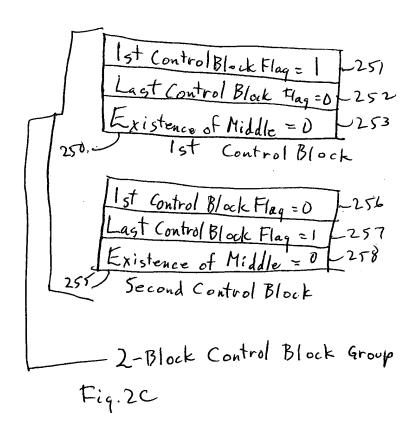
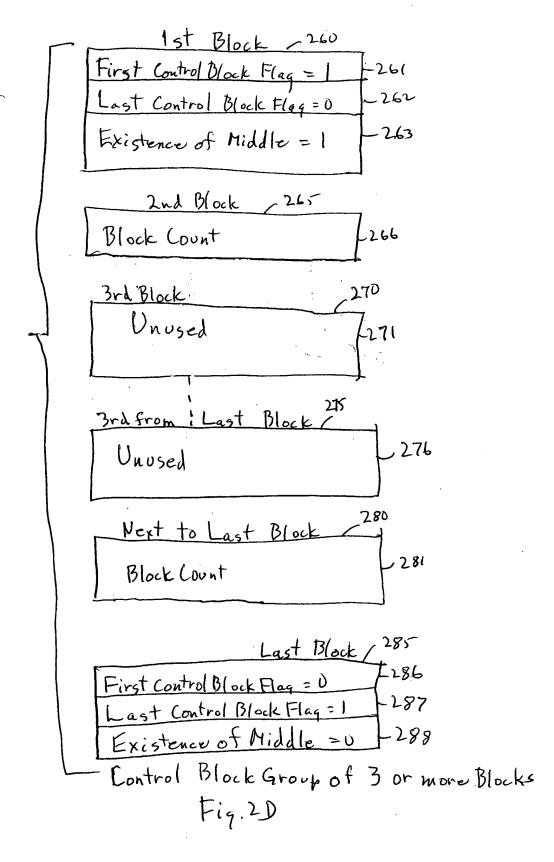


Fig. 2B





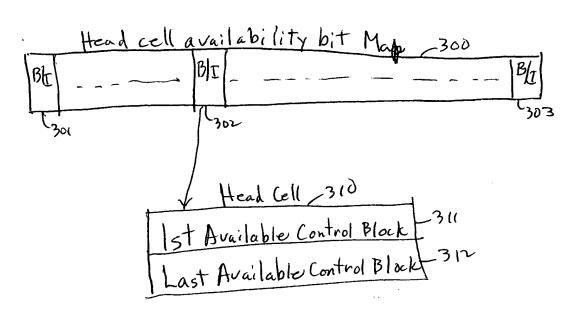


Fig. 3

FIG. 4

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- 400 Receive request to allocate N bytes
- 402 \sim Search for linked list of smallest minimum block size \geq N that contains an available user block
- 404 Seize available user block
- 406 Initialize control blocks for available user block
- 408 C Link surplus of available user block on list having largest minimum block size ≤ surplus
- 410 Initialize surplus control blocks and linked list for the surplus control block

- 500—Receive request to deallocate M bytes starting at specified address
- 502 Is previous set of user blocks idle?

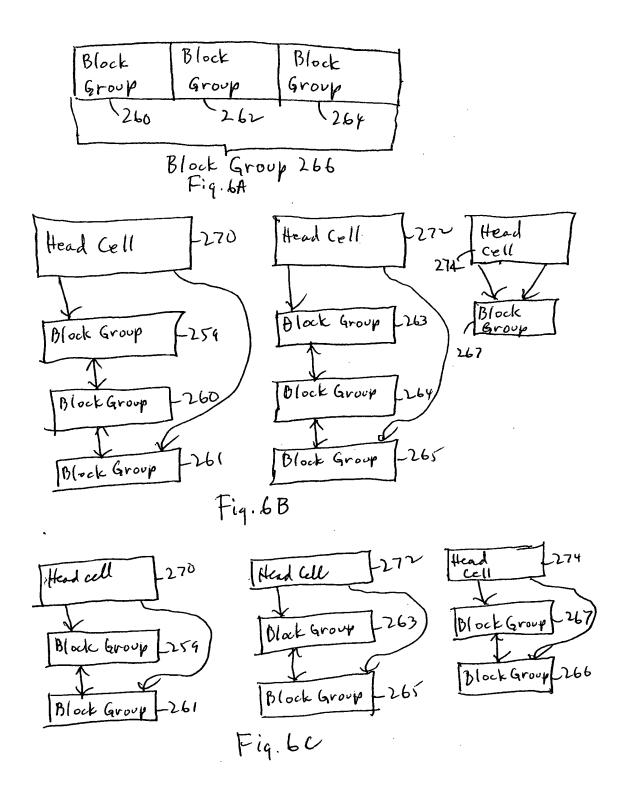
504 Add previous set of user blocks to block being deallocated; remove previous set of user blocks from linked list containing previous user block

506 Is next set of user blocks idle?

508 Add next set of user blocks to a block being deallocated; remove next set of user blocks from linked list containing that set of user blocks

N

510 ✓Insert merged user block into list having largest minimum block size ≤ merged user block size



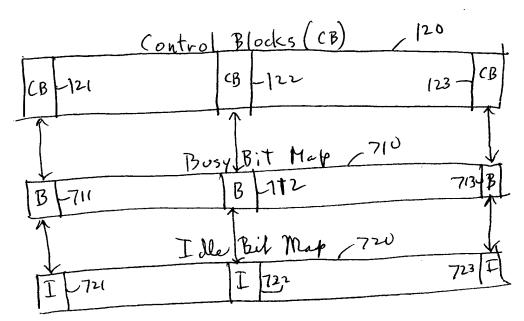


Fig. 7